extension 33 of the skin penetration section 6 can be screwed. In this case, a screw head 14' corresponding to the nut 14 can be formed in one piece with the connector section 7, as is shown, since the pressing force conferred by the screw head 14' is exerted on the inner area 9 of the planar part 8 via the threaded extension 33.

5 Patent claims

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- 1. __An_implant_with_an_implant_body_(1), comprising_an_implant_section-(5)-intended_to remain in the body, a skin penetration section (6), and an extracorporeal connector section (7), and with a planar part (8) which surrounds the skin penetration section (6), is provided for adhering to skin tissue and has a surface forming a support for a skin layer (4) surrounding the skin penetration section (6), characterized in that the planar part (8) adjoins the skin penetration section (6) in a sterile manner and comprises, in one integral piece, an inner area (9) adjoining the skin penetration section (6), and an outer area (10), the inner area (9) being made so stiff that it forms an inherently fixed support surface for a skin layer (4) surrounding the skin penetration section (6), and the outer area (10) has an elasticity adapted to the elasticity of the surrounding tissue.
- 2. The implant as claimed in claim 1, characterized in that the implant body (1) is a load-bearing part whose implant section (5) is designed as an anchoring section, and whose connector section (6) is designed for attachment of a load, in particular of a prosthesis.
- 3. The implant as claimed in claim 1 or 2, characterized in that the elasticity of the planar part (8) increases continuously toward the outside.

- 4. The implant as claimed in one of claims 1 through 3, characterized in that the planar part (8) is made of silicone.
- 5. The implant as claimed in one of claims 1 through 4, characterized in that the planar part (8) is formed from several individual pieces.
- 5 6. The implant as claimed in one of claims 1 through 5, characterized in that the planar part (8) has a multiplicity of through-openings (19, 19).
 - 7. The implant as claimed in one of claims 1 through 6, characterized in that at least one surface of the plate-like part (8) is provided with groove-like depressions (20, 21) or with webs.
- 10 8. The implant as claimed in one of claims 1 through 7, characterized in that shaped elements (23, 24, 25, 26) promoting the anchoring of tissue are applied at least on one part of at least one surface of the planar part (8).
 - 9. The implant as claimed in one of claims 1 through 8, characterized in that the surface of the planar part (8) has, at least in some areas, a porous, net-like or roughened structure.
- 15 10. The implant as claimed in one of claims 1 through 9, characterized in that the surface is provided with substances that promote the adherence of tissue.
 - 11. The implant as claimed in one of claims 1 through 10, characterized in that the planar part (8) has a substantially circular periphery.

- 12. The implant as claimed in one of claims 1 through 11, characterized in that the planar part (8) adjoins the implant body (1) substantially at right angles to a longitudinal axis of the implant body (1).
- 13. The implant as claimed in one of claims 1 through 12, characterized in that the planar part (8) is shaped like the top of a mushroom, with a jacket surface forming an acute angle with respect to a longitudinal axis of the implant body (1).
 - 14. The implant as claimed in one of claims 1 through 13, characterized in that the planar part (8) is coated with bioactive material at least on one part of its surface.
- 15. The implant as claimed in claim 14, characterized in that the surface is coated in an island pattern with interstices.
 - 16. The implant as claimed in one of claims 1 through 15, characterized in that the planar part (8) is connected releasably to the implant body (1).
 - 17. The implant as claimed in one of claims 1 through 16, characterized in that, in order to receive the planar part (8), the implant body (1) has a stepped diameter reduction forming an annular shoulder (12).

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18. The implant as claimed in claim 17, characterized in that the sterile connection is produced by laying the planar part (8) flat on the annular shoulder (12) of the implant body (1) with axial pretensioning.

- 19. The implant as claimed in one of claims 1 through 17, characterized in that the sterile connection is produced by a peripheral adhesive or weld filling the gap between the implant body (1) and the planar part (8).
- The implant as claimed in one of claims 1 through 19, characterized in that the implant body (1) is provided with a bioactive surface at least in the area of connection to the distal surface of the planar part (8).
 - 21. The implant as claimed in one of claims 1 through 20, characterized in that the implant body is provided, in its connector section (7), with a surface that prevents microorganisms settling on it.
- 10 22. The implant as claimed in one of claims 1 through 21, characterized in that several implant bodies (1) are connected to a common planar part (8).
 - 23. The implant as claimed in one of claims 1 through 21, characterized in that, starting from an implant section (5), the implant body (1) branches into several skin penetration sections (6) which are connected to planar parts (8).
- 15 M2:20800877.01